# **Use of Chimpanzees in Scientific Research Should Be Banned**

Animal Experimentation, 2013

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A recent report by the <u>Institute of Medicine</u> examined the necessity of using <u>chimpanzees</u> in biomedical research. The report did not identify any current research field in which the use of chimpanzees was definitely necessary. However, the report did not ban chimpanzee research in the future. This conclusion fails to take into account the moral significance of the emotional and physical <u>suffering</u> of the animals. Most advanced nations have banned the use of chimpanzees in <u>medical research</u>, and the United States should do so as well.

Few fields of science are more dogged by controversy than experimentation on chimpanzees. On the one hand, chimpanzees are our closest living relatives, which makes them potentially superior to all other species in predicting human responses to new <u>drugs</u> or other clinical interventions. On the other hand, their advanced psychological and social characteristics also increase their risks of suffering, when subjected to confinement, social disruption, and participation in invasive and potentially harmful research. Furthermore, severe abuse during research projects has also been documented in major research facilities.

Accordingly, invasive chimpanzee research is increasingly attracting the concern of scientists, philosophers, legislators and the public and chimpanzees are winning some small victories. On December 15, 2011, this resulted in the release of an expert report by the Institute of Medicine (IOM) called "Chimpanzees in Biomedical and Behavioral Research: Assessing the Necessity." This report failed to identify any current research field in which such research is definitely necessary. Yet it stopped short of recommending an outright ban, concluding that, "a new, emerging, or reemerging disease or disorder may present challenges to treatment, prevention, and/or control that defy non-chimpanzee models and technologies and thus may require their future use." Thus, some researchers such as Dr. John VandeBerg, Director of the Texas Biomedical Research Institute in San Antonio, Texas, sickeningly view chimpanzees as books on a shelf in a library waiting to be used if they're needed.

The ethical foundations for conducting [biomedical] research [on chimpanzees] are deeply questionable.

## The Horrific Costs to Chimpanzees

In coming to this conclusion, however, the IOM appeared to give little consideration to the many, varying, and complex animal welfare problems accruing from such research. Yet these may be

profound. In his recent book *The Costs and Benefits of Animal Experiments*, Australian veterinarian Andrew Knight examined in detail the costs incurred by chimpanzees and other animals subjected to biomedical research, and the human benefits that result from it. Recent studies have established beyond any doubt that the effects of all sorts of research on <u>laboratory animals</u>, especially long term, can be severe. Chimpanzees recently retired from U. S. laboratories exhibit gross stereotypes (repetitive, apparently purposeless behaviors) indicating psychological distress that is both profound and chronic. Other behavioral abnormalities include self-mutilation, inappropriate aggression, fear, withdrawal, and mood and anxiety disorders including <u>post-traumatic stress disorder</u> (PTSD).

The implications of what we're learning about the incredible suffering of chimpanzees and other animals who are used in invasive research are medically and morally profound. As Knight states, "It is increasingly acknowledged that such abnormal behaviours resemble symptoms associated with human psychiatric disorders such as depression, anxiety disorders, eating disorders, and post-traumatic stress disorder, and that pharmacological treatment modalities similar to those applied to human patients may be appropriate, and, indeed, morally compelled, for severely disturbed animal patients.... Long-term therapeutic combination with positive reinforcement training, environmental enrichment, and social and environmental modification may be necessary in severe cases."

## **Differing Treatment Standards**

The ethical foundations for conducting such research are deeply questionable. To illustrate this point, Knight asks us to consider an analogous legal scenario:

"Although these highly sentient creatures are innocent of causing any human grievance, including the serious diseases we attempt to induce in them, we sometimes subject chimpanzees to conditions that would cause widespread outrage if used to punish the most heinous of human criminals—for years on end, and, in some cases, for decades.... In contrast, human criminals are not normally punished until proven guilty beyond reasonable doubt. The application of such differing treatment standards to humans and chimpanzees reveals a lack of 'humanity' paradoxically less characteristic of chimpanzees, than of ourselves."

Not a year seems to pass without important new discoveries about hitherto unsuspected animal cognitive abilities and emotional capacities that remind us how much we still have to learn about other species.

#### The Bases for Moral Consideration

Exactly what morally profound differences between chimpanzees and humans justify such markedly differing treatment standards? Their highly evolved psychological and social characteristics create a strong ethical basis for respecting at least their most basic and essential needs, such as their interests in avoiding being kept in small cages in captivity, pain, suffering and death. Those who would deny such consideration to chimpanzees and other animals usually try to claim the existence in humans of some morally relevant characteristic(s) supposedly absent in other species, such as intelligence, language, or tool-use. Interestingly, however, they nevertheless usually extend such consideration to very young, old, injured, or ill humans, who also lack such abilities to various

degrees.

It is absolutely right that we should continue to value such people as partially conscious or partially self-conscious beings, with unique personalities, and accordingly grant them <a href="https://www.numan.nu

It is also worth considering that not a year seems to pass without important new discoveries about hitherto unsuspected animal cognitive abilities and emotional capacities, that remind us how much we still have to learn about other species. While significant doubt remains, it seems fair to extend to animals the benefit of that doubt because current data show clearly that much of what we thought to be true of other animals actually is.

## Money, Self-Interest, and False Assumptions

Contrary to such ethical considerations, the U. S. remains heavily involved in invasive chimpanzee research. As of May 2011, some 937 chimpanzees remained incarcerated within U. S. laboratories. The lifetime cost of supporting 650 federally funded chimpanzees was estimated at \$325 million in 2007. Virtually every other country, with the possible exception of Gabon, whose status is unclear, has long since terminated such research. Why, then, does the U. S. persist?

Unfortunately, the answers center on money, self-interest, and false assumptions. Researchers whose grants and careers depend on such research frequently claim it has been of crucial importance in combatting serious human diseases, although rigorous supporting evidence is rarely, if ever, forthcoming. In his book Knight thoroughly tests such claims, by surveying the published scientific literature to determine the proportion of invasive chimpanzee studies that actually contribute to human medical advancements.

He shows that the majority of such studies actually remain un-cited by subsequent scientific papers in any field of research, thereby contributing little to the advancement of biomedical knowledge. Only some 15% of chimpanzee studies are cited by papers describing medical interventions potentially effective in humans. However, detailed examination of such medical papers reveal that in vitro (cell-based) studies, human clinical and population studies, molecular methods and tests, and genome studies, are by far the most important sources of knowledge. Most chimpanzee studies are, at best, of peripheral importance, and none of those studied by Knight and his colleagues made an essential contribution, or, in most cases, a significant contribution of any kind, to the development of the medical methods studied....

## **Other Laboratory Species**

even less likely to be generally predictive of human outcomes than chimpanzees ... by extrapolation, our current reliance on animal models of humans must be questioned in all fields of clinically oriented biomedical research and toxicity testing."

The wealth of data Knight provides confirms this conclusion. He draws on more than a decade of research and over 500 scientific publications to rigorously test common assumptions about <u>animal experimentation</u>. He offers revealing insights into the true contributions of such research to human healthcare, as well as the nature, severity and prevalence of the impacts experienced by laboratory animals. He comprehensively reviews animal use within life and health sciences education, as well as alternative research and educational strategies. This has allowed him to provide, in polished style, one of the most definitive answers yet published to a question with implications for animal ethics, biomedical research, and society at large, namely, "Is animal experimentation ethically justifiable?" And, the answer is a resounding "no".

## **Further Readings**

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